Amendments to the Specification:

Please replace paragraph [0019] beginning on page 5, with the following amended paragraph:

[0019] Referring to both Figs. 1 and 2, connected to imprint head 18 is a template 26 having a mold 28 thereon. Mold 28 includes a plurality of features defined by a plurality of spaced-apart recessions 28 and protrusions 28b. Projections 28b have a width W_1, and recesses 28a have a width W_2, both of which are measured in a direction that extends transversely to Z axis. The plurality of features defines an original pattern that is to be transferred into a substrate **[[30]]** 31 positioned on motion stage 20. To that end, imprint head 18 and/or motion stage 20 may vary a distance "d" between mold 28 and substrate **[[30]]** 31. In this manner, the features on mold 28 may be imprinted into a flowable region of substrate **[[30]]** 31, discussed more fully below. Radiation source 22 is located so that mold 28 is positioned between radiation source 22 and substrate **[[30]]** 31. As a result, mold 28 is fabricated from material that allows it to be substantially transparent to the radiation produced by radiation source 22.

Please replace paragraph [0020] beginning on page 6, with the following amended paragraph:

[0020] Referring to both Figs. 2 and 3, a flowable region, such as [[~~an~~]] imprinting layer 34, is disposed on a portion of [[~~a~~]] surface 32 that presents a substantially planar profile. A flowable region may be formed using any known technique, such as a hot embossing process disclosed in United States patent number 5,772,905, which is incorporated by reference in its entirety herein, or a laser assisted direct imprinting (LADI) process of the type described by Chou et al. in Ultrafast and Direct Imprint of Nanostructures in Silicon, Nature, Col. 417, pp. 835-837, June 2002. In the present embodiment, however, a flowable region consists of imprinting layer 34 being deposited as a plurality of spaced-apart discrete droplets 36 of [[~~a~~]] material 36a on substrate **[[30]]** 31, discussed more fully below. An exemplary system for depositing droplets 36 is disclosed in United States patent application number 10/191,749, filed July 9, 2002, entitled "System and Method for Dispensing Liquids," assigned to the assignee of the present invention, and which is incorporated by reference herein in its entirety. Imprinting layer 34 is formed from material 36a that may be selectively polymerized and cross-linked to record the original pattern therein, defining a recorded pattern. An exemplary composition for material 36a is disclosed in ~~Untied~~ United States patent application number 10/463,396, filed June 16, 2003, and entitled "Method to Reduce Adhesion Between a Conformable Region and a Pattern of a Mold," which is incorporated by reference in its entirety herein. Material 36a is shown in Fig. 4 as being cross-linked at points 36b, forming [[~~a~~]] cross-linked polymer material 36c.

Please replace paragraph [0024] beginning on page 8, with the following amended paragraph:

[0024] Referring to Fig. 5, additional processing may be employed to complete the patterning of substrate **[[30]]** 31. For example, ~~substrate 30~~ substrate 31 and imprinting layer 34 may be etched to transfer the pattern of imprinting layer 34 into ~~substrate 30~~ substrate 31, providing a patterned surface 32a, shown in Fig. 6. To facilitate etching, the material from which imprinting layer 34 is formed may be varied to define a relative etch rate with respect to ~~substrate 30~~ substrate 31, as desired. The relative etch rate of imprinting layer 34 to ~~substrate 30~~ substrate 31 may be in a range of about 1.5:1 to about 100:1.

Please replace paragraph [0027] beginning on page 8, with the following amended paragraph:

[0027] As discussed above, during imprinting template 26 and, therefore, mold 28 are brought into proximity with substrate **[[30]]** 31 before patterning imprinting material 36a is disposed on a region 77. Specifically, template 26 is brought within tens of microns of substrate **[[30]]** 31, e.g., 15 microns more or less. It has been found desirable to perform localized control of the atmosphere 78 that is proximate to both template 26 and region 77. For example, to avoid the deleterious effects of gases and/or gas pockets present in imprinting material 36a and/or subsequently trapped in the patterned imprinting layer 34, it has been found beneficial to control the consistency of fluid in atmosphere 78, the composition of gases in atmosphere 78; and/or the pressure of atmosphere 78.

Please replace paragraph [0028] beginning on page 8, with the following amended paragraph:

[0028] Referring to Fig. 9, to facilitate control of atmosphere 78, chuck body 42 is designed to facilitate the passage of fluids proximate to mold 28 and imprint head 18 includes a baffle 100 surrounding template 26. Specifically, baffle 100 extends from imprint head 18, terminating in a nadir 102 that lies in a plane in which a surface 26a lies. In this fashion, mold 28 extends beyond nadir 102 to facilitate contact with region 77. Chuck body 42 includes one or more throughways, two of which are shown as 104 and 106. Apertures 104a and 106a of throughways 104 and 106, respectively, are disposed in a surface of chuck body 42 disposed between template 26 and baffle 100, referred to as a peripheral surface 100a. Throughways 104 and 106 place apertures 104a and 106a in fluid communication with fluid supply system 70. Baffle 100 functions to slow the movement of fluid exiting apertures 104a and 106a away from mold 28. To that end, baffle 100 includes first and second opposed surfaces 102a and 102b. First opposed surface 102a extends from nadir 102 away from substrate 30 and faces template 26. Second opposed surface 102b extends from nadir 102 away from substrate **[[30]]** 31 and faces away from mold 28. Although it is not necessary, first opposed surface 102a is shown extending obliquely with respect to second opposing surface 102b. With this configuration, atmosphere 78 may be controlled by introduction or evacuation of fluid through apertures 104a and 106a. However, first and second opposed surfaces 102a and 102b may extend parallel to one another from nadir 102.

Please replace paragraph [0029] beginning on page 8, with the following amended paragraph:

[0029] Referring to Figs. 3 and 9, in one embodiment, atmosphere 78 is established so that the transport of the gases present therein to imprinting material 36a in region 77 is increased. The term transport is defined to mean any mechanism by which the propagation of gases through imprinting material 36a ~~is increased~~ occurs, e.g., ~~increased~~ solubility, ~~increased~~ diffusion and the like. To that end, fluid supply system 70 may include a supply of imprinting material 36a. Under control of processor 25, which is in data communication with fluid supply system 70, imprinting material 36a may be introduced through apertures 104a and 106a to saturate atmosphere 78 with imprinting material 36a. This was found to reduce, if not completely do away with, the quantity of gases, such as air, trapped in the imprinting layer 34 during imprint processes. This is beneficial as it was found that the presence of air in imprinting layer 34 creates undesirable voids. Alternatively, it was found that by saturating atmosphere 78 with carbon dioxide and/or helium the quantity of air trapped in imprinting layer 34, shown in Fig. 5, was substantially reduced if not avoided. It should be understood that a mixture of imprinting material 36a, shown in Fig. 3, carbon dioxide and/or helium may be introduced into atmosphere 78, shown in Fig. 9, to reduce the quantity of air trapped in imprinting layer 34, shown in Fig. 5.

Please replace paragraph [0033] beginning on page 12, with the following amended paragraph:

[0033] To ensure that the ~~fluids~~ fluid exiting apertures 104a and 106a crosses through processing region 78a, it may be advantageous to concurrently pulse fluid through both apertures 104a and 106a concurrently and then alternatingly evacuate through one of apertures 104a or 106a. Concurrently introducing the fluid through both apertures 104a and 106a minimizes the time required to saturate atmosphere 78. Alternatingly evacuating the fluid through one of apertures 104a and 106a ensures that the fluid travels through processing region 78a. For example, a first step would include introducing fluid into atmosphere 78 through both apertures 104a and 106a. A second step would include evacuating the fluid through one of apertures 104a and 106a, e.g., aperture 104a. Thereafter, at a third step, fluid would be introduced into atmosphere 78 through both apertures 104a and 106a, concurrently. At a fourth step, fluid would be evacuated through one of apertures 104a and 106a that was not employed in the previous step to remove fluid, e.g., aperture 106a. It should be understood that evacuation may occur through one of apertures 104a and 106a, while fluid is being introduced through the remaining aperture of apertures 104a and 106a. Alternatively, evacuation may occur in the absence of a fluid flow into atmosphere 78. The desired result is that fluid ingression into atmosphere 78 and fluid evacuation therefrom occurs so that the desired concentration of fluid is present.

Please replace paragraph [0036] beginning on page 14, with the following amended paragraph:

[0036] Referring to ~~Figs. 9, 10 and 11~~ Figs. 9 and 10, in another embodiment, a fluid stream may be introduced through each of apertures 104a, 106a, 108a and 110a sequentially so that a flow cell 112 may be created between template 26 and region 77. Flow cell 112 would facilitate ingression of molecules in the fluid streams into processing region 78a to provide the benefits mentioned above. For example, first a fluid flow may be introduced through aperture 104a and then terminated. After termination of fluid flow through aperture 104a, fluid flow through aperture 106a is commenced to introduce fluid into atmosphere 78. Subsequently, fluid flow through aperture 106a is terminated. After termination of fluid flow through aperture 106a, fluid flow through aperture 108a is commenced to introduce fluid into atmosphere 78. Fluid flow in through aperture 108a is subsequently terminated. After termination of fluid flow through aperture 108a, fluid flow through aperture 110a is commenced to introduce fluid into atmosphere 78. In this manner, fluid is introduced into atmosphere 78 through a single quadrant at any given time. However, it may be desirable to introduce fluid into more than one quadrant. Although this may frustrate creation of flow cell 112, it is within confines of the present invention.